Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.   (currently amended) An article comprising a machine-readable medium embodying information indicative of instructions that when performed by one or more machines result in operations comprising:

determining a speech-presence-uncertainty metric based on input representing audio information; and

performing smoothing during noise suppression of the input information based on the determined speech-presence-uncertainty metric to produce output representing audio information with enhanced speech and reduced musical noise;

wherein determining the speech-presence-uncertainty metric comprises determining the speech-presence-uncertainty metric based on a full band minimum mean square error estimator weighting of the audio input.

2.   (original) The article of claim 1, wherein determining the

speech-presence-uncertainty metric comprises:

       determining a speech presence likelihood based on the input

information and filter coefficients from a noise suppressor

system; and

       setting the speech-presence-uncertainty metric based on the

determined speech presence likelihood.

3.   (original) The article of claim 2, wherein performing

smoothing during noise suppression comprises:

       low-pass filtering the filter coefficients from the noise

suppressor system based on the speech-presence-uncertainty

metric; and

       suppressing noise in the input information based on the

filtered filter coefficients.

4.   (original) The article of claim 3, wherein setting the

speech-presence-uncertainty metric comprises:

       determining a smoothed speech presence likelihood based on

the determined speech presence likelihood and a past smoothed

speech presence likelihood; and

       setting the speech-presence-uncertainty metric based on the

determined smoothed speech presence likelihood.

5.   (original) The article of claim 3, wherein the speech-presence-uncertainty metric comprises a Boolean value, low-pass filtering comprises selectively low-pass filtering the filter coefficients based on the Boolean value, and suppressing the noise comprises suppressing the noise based on the selectively filtered filter coefficients.

6.   (original) The article of claim 3, wherein determining the speech presence likelihood comprises determining the speech presence likelihood based on transformed information, suppressing the noise comprises suppressing the noise based on the transformed information, and the operations further comprises:

    performing a time to frequency transform on the input information; and

    generating the output information by performing an inverse time to frequency transform on the noise suppressed information.

7.   (original) The article of claim 3, wherein the speech-presence-uncertainty metric comprises a continuous value and low-pass filtering the filter coefficients comprises variably low-pass filtering based on the speech-presence-uncertainty metric to effect a varying amount of smoothing.

8.   (original) The article of claim 3, wherein the filter

coefficients comprise filter coefficients formulated as a

component-wise multiplication of a noisy speech spectrum in a

frequency domain.

9.   (cancelled)

10.   (currently amended) A method comprising:

      determining a speech-presence-uncertainty metric based on

input representing audio information; and

      performing smoothing during noise suppression of the input

information based on the determined speech-presence-uncertainty

metric to produce output representing audio information with

enhanced speech and reduced musical noise;

      wherein determining the speech-presence-uncertainty metric

comprises determining the speech-presence-uncertainty metric

based on a full band minimum mean square error estimator

weighting of the audio input.

11.   (original) The method of claim 10, wherein determining the speech-presence-uncertainty metric comprises:

determining a speech presence likelihood based on the input information and filter coefficients from a noise suppressor system;

determining a smoothed speech presence likelihood based on the determined speech presence likelihood and a past smoothed speech presence likelihood; and

setting the speech-presence-uncertainty metric based on the determined smoothed speech presence likelihood.

12.   (original) The method of claim 11, wherein performing smoothing during noise suppression comprises:

low-pass filtering the filter coefficients from the noise suppressor system based on the speech-presence-uncertainty metric; and

suppressing noise in the input information based on the filtered filter coefficients.

13.   (original) The method of claim 12, wherein determining the

speech presence likelihood comprises determining the speech

presence likelihood based on transformed information,

suppressing the noise comprises suppressing the noise based on

the transformed information, and the method further comprises:

      performing a time to frequency transform on the input

information; and

      generating the output information by performing an inverse

time to frequency transform on the noise suppressed information.

14.   (original) The method of claim 13, wherein the filter

coefficients comprise filter coefficients formulated as a

component-wise multiplication of a noisy speech spectrum in a

frequency domain.

15.   (cancelled)

16.   (currently amended) A system comprising:

a noise suppressor system that receives input representing audio information and generates filter coefficients; and

a back-end smoothing system that receives the input information and the filter coefficients, determines a speech-presence-uncertainty metric based on the input information and the filter coefficients, and performs smoothing during noise suppression of the input information based on the determined speech-presence-uncertainty metric to produce output representing audio information with enhanced speech and reduced musical noise;

wherein the speech-presence-uncertainty metric is based on a full band minimum mean square error estimator weighting.

17.   (original) The system of claim 16, wherein the noise suppressor system comprises a minimum mean square error estimator, and the filter coefficients comprise filter coefficients formulated as a component-wise multiplication of a noisy speech spectrum in a frequency domain.

18.   (cancelled)

19.   (currently amended) The system of claim <u>17</u> [[18]], further

comprising:

    a communication interface;

    an input-output system; and

    a processing system coupled with the communication

interface and the input-output system.

20.   (original) The system of claim 19, wherein the noise

suppressor system and the back-end smoothing system are

integrated with the processing system.

21.   (original) The system of claim 19, wherein the noise

suppressor system and the back-end smoothing system are

integrated with the input-output system.

22.   (original) The system of claim 19, wherein the input

information is received from the input-output system.

23.   (currently amended) An apparatus comprising:

       speech presence uncertainty assessment circuitry coupled to

receive input representing audio information and noise reduction

filter coefficients, wherein the speech presence uncertainty

assessment circuitry determines a speech-presence-uncertainty

metric based on the input audio information and the noise

reduction filter coefficients; and

       smoothing circuitry comprising a filter and a multiplier

unit, the filter coupled to receive the noise reduction filter

coefficients, and the multiplier unit coupled to receive the

input audio information and output smoothed filter coefficients

from the filter;

       wherein the speech-presence-uncertainty metric is based on

a full band minimum mean square error estimator weighting.

24.   (cancelled)

25.   (currently amended) The apparatus of claim 23 [[24]],

wherein the noise reduction filter coefficients comprise filter

coefficients formulated as a component-wise multiplication of a

noisy speech spectrum in a frequency domain.

26. (original) The apparatus of claim 25, further comprising a
time to frequency unit coupled to receive speech data and
transform the speech data into the input information, and a
frequency to time unit coupled with the multiplier unit to
transform the multiplier unit's output to generate enhanced
speech data output with reduced musical noise.

27. (original) The apparatus of claim 26, wherein the filter
comprises a low-pass filter.

28. (original) The apparatus of claim 27, wherein the low-pass
filter comprises an FFT/IFFT filter.

29. (currently amended) A system comprising:

     means for suppressing noise in input representing audio
information based on filter coefficients; and

     speech-presence-uncertainty-assessment means for driving
smoothing of the filter coefficients used by the means for
suppressing noise to reduce musical noise and enhance speech;

     wherein the speech-presence-uncertainty-assessment means
for driving smoothing comprises means for generating a full band
minimum mean square error estimator weighting to drive the
smoothing.

30. (original) The system of claim 29, further comprising means

for smoothing the filter coefficients.

31. (original) The system of claim 30, wherein the means for

suppressing noise comprises a minimum mean square error

estimator.